

Patent Abstracts of Japan

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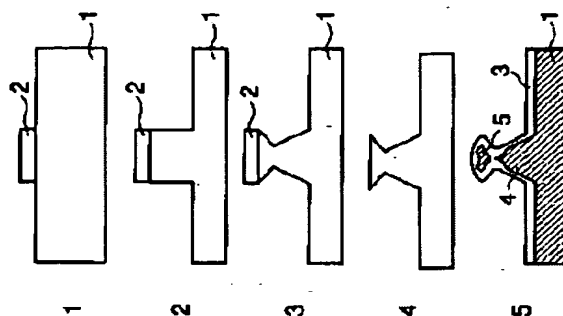
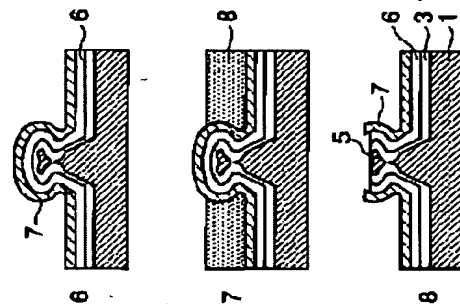
APPLICANT : FUJITSU LTD;

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INT.CL. : H01J 1/304 H01J 9/02

TITLE : FIELD EMISSION CATHODE

この発明の電界放出陰極の第1実施例の製造工程の説明図



ABSTRACT : PROBLEM TO BE SOLVED: To provide a field emission cathode in a MIMIV structure offering lower field operation and less deteriorating electron emission property.

SOLUTION: A field emission cathode comprises a substrate, the surface of which is covered partially or wholly with an dielectric film, having conductivity at predetermined positions on the dielectric film, and a gate electrode formed on the substrate via an insulating film into a predetermined shape. The substrate has a plurality of protrusions covered with the dielectric film for emitting electrons, and the protrusions are formed with lower protrusions having conductivity on at least the sharpened surfaces and small pieces having conductivity on at least part of the surface formed over the lower protrusions via the dielectric film.

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